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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,074	11/13/2003	Toru Kubokawa	1232-5211	2623
27123	7590	10/11/2005		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER GOLDBERG, BRIAN J	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/714,074

Applicant(s)

KUBOKAWA, TORU

Examiner

Brian Goldberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: D of Fig 2, B132 and B323 of Fig 4, and B323 of Fig 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. (US 6375314) in view of Priestnall et al. (US 2003/0165727) and Tsutsumi et al. (US 2004/0248003).

4. Regarding claims 1-5, Reed et al. disclose "an ink jet recording apparatus (40 of Fig 3) comprising: recording means for forming an image (col 2 ln 47-55) by sticking recording fluid (32 of Fig 3) onto a recording material (31 of Fig 3) and; a detachable and exchangeable supplies container (30 of Fig 3) for containing the recording fluid (32 of Fig 3) used by said recording means; and wherein said supplies container includes therein a supplies container for containing fuel (34 of Fig 3 and col 6 ln 8-10, where a battery is the supplies container and the chemicals inside the battery are the fuel)..." and "wherein said supplies container is a container integrally containing the recording fluid (32 of Fig 3) used by said recording means, the recording material (31 of Fig 3) and the fuel (34 of Fig 3)..." and "further comprising information transmitting means for receiving image information for image formation performed by said recording means from an external device (Fig 1), and wherein said information transmitting means are an interface of radio type (col 2 ln 56-65)." Thus Reed et al. meet the claimed invention except providing "a fuel cell, and a hybrid cell comprised of said fuel cell and a secondary cell as a power supply system, and...when said ink jet recording apparatus is not driven, said power supply system stores an electric power generated by said fuel cell into said secondary cell" and "wherein said secondary cell has a capacity capable of storing the electric power generated by said fuel cell using the fuel contained in said supplies container" and "wherein said fuel cell is a direct methanol fuel cell (DMFC)."

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5. Priestnall et al. teach providing “a fuel cell, and a hybrid cell comprised of said fuel cell and a secondary cell as a power supply system (Par [0020], [0021] and [0026])” and “wherein said fuel cell is a direct methanol fuel cell (DMFC) (Par [0073] In 9-10).”

Priestnall et al. state that there may be more than one cell. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a direct methanol fuel cell in hybrid with a secondary cell as a power supply system. One would have been motivated to so modify Reed et al. by substituting the fuel cell described by Priestnall et al. for the power source described by Reed et al. for the benefit of providing a power supply that is capable of delivering high power levels on demand, makes more effective use of the space it occupies, and is more environmentally friendly as described by Priestnall et al. in paragraph [0019].

6. Tsutsumi et al. teach “when said ink jet recording apparatus is not driven, said power supply system stores an electric power generated by said fuel cell into said secondary cell (Par [0011] In 2-3 and Par [0013]” and “wherein said secondary cell has a capacity capable of storing the electric power generated by said fuel cell using the fuel contained in said supplies container Par [0013] and Par [0022] In 1-5).” It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to store an electric power generated by the fuel cell, using the fuel provided, in a secondary cell capable of power storage. One would have been motivated to so modify the Reed et al. and Priestnall et al. combination by enabling the secondary cell to have energy storage properties for the benefit of providing a hybrid cell with an increased energy capacity which better utilizes fuel resources.

7. Regarding claims 6-8, Reed et al. disclose “a cartridge detachable to a main body of said recording apparatus (30 of Fig 3) and adapted to contain a sheet (31 of Fig 3); conveying means for conveying the sheet (35 of Fig 3) contained in said cartridge; recording head holding means for holding a recording head for recording an image on the sheet conveyed by said conveying means (col 2 ln 47-55); and a storing portion provided in said cartridge and adapted to store fuel (34 of Fig 3 and col 6 ln 8-10).”

Reed et al. state that ink is transferred onto a printable medium and can employ conventional thermal ink jet technology which comprises using a recording head, and thus a recording head holding means is implicitly necessary. Also, the battery contained in the cartridge is the storing portion and the chemicals inside the battery are the fuel. Thus Reed et al. meet the claimed invention except “a fuel cell for generating an electric power for operating said recording apparatus; and a storing portion...adapted to store fuel for said fuel cell” and “further comprising a secondary cell capable of storing the electric power generated by said fuel cell...wherein said fuel cell is a direct methanol fuel cell (DMFC).”

8. Priestnall et al. teach “a fuel cell for generating an electric power for operating said recording apparatus; and a storing portion...adapted to store fuel for said fuel cell (Par [0020], [0021] and [0026])...wherein said fuel cell is a direct methanol fuel cell (DMFC) (Par [0073] ln 9-10).” Priestnall et al. state that the fuel cell can contain the fuel itself, thus acting as a storing portion to store fuel. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a direct methanol fuel cell to generate electric power. One would have been motivated to so

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modify Reed et al. by substituting the fuel cell described by Priestnall et al. for the power source described by Reed et al. for the benefit of providing a power supply that is capable of delivering high power levels on demand, makes more effective use of the space it occupies, and is more environmentally friendly as described by Priestnall et al. in paragraph [0019].

9. Tsutsumi et al. teach providing “a secondary cell capable of storing the electric power generated by said fuel cell (Par [0011] ln 2-3 and Par [0013]).” It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to store an electric power generated by the fuel cell in a secondary cell capable of power storage. One would have been motivated to so modify the Reed et al. and Priestnall et al. combination by enabling the secondary cell to have energy storage properties for the benefit of providing a hybrid cell with an increased energy capacity which better utilizes fuel resources.

10. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Priestnall et al.

11. Regarding claims 9 and 10, Reed et al. disclose “a cartridge (30 of Fig 3) detachable to a recording apparatus (40 of Fig 3) having recording means (col 2 ln 47-55) for recording on a sheet and a fuel cell, and containing the sheet (31 of Fig 3) [or “and containing ink (32 of Fig 3)”] to be supplied to said recording apparatus, said cartridge comprising: a storing portion for storing a fuel (34 of Fig 3)...” A battery contained in the cartridge is the storing portion and the chemicals inside the battery are

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the fuel. Thus Reed et al. meet the claimed invention except "a fuel cell" and "a storing portion for storing a fuel to be supplied to said fuel cell."

12. Priestnall et al. teach providing a "fuel cell (Fig 2)" and "a storing portion for storing a fuel to be supplied to said fuel cell (Par [0020], [0021] and [0026])." Priestnall et al. state that the fuel cell can contain the fuel itself, thus acting as a storing portion to store fuel. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a fuel cell and a storing portion for storing a fuel. One would have been motivated to so modify Reed et al. by substituting the fuel cell described by Priestnall et al. for the power source described by Reed et al. for the benefit of providing a power supply that is capable of delivering high power levels on demand, makes more effective use of the space it occupies, and is more environmentally friendly as described by Priestnall et al. in paragraph [0019].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

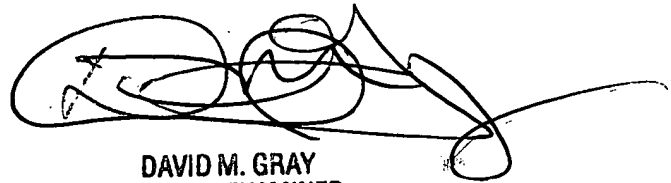
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJG

A handwritten signature in black ink, appearing to read 'D. M. Gray', with a long horizontal flourish extending to the right.

DAVID M. GRAY  
PRIMARY EXAMINER